Computer Assignment 4
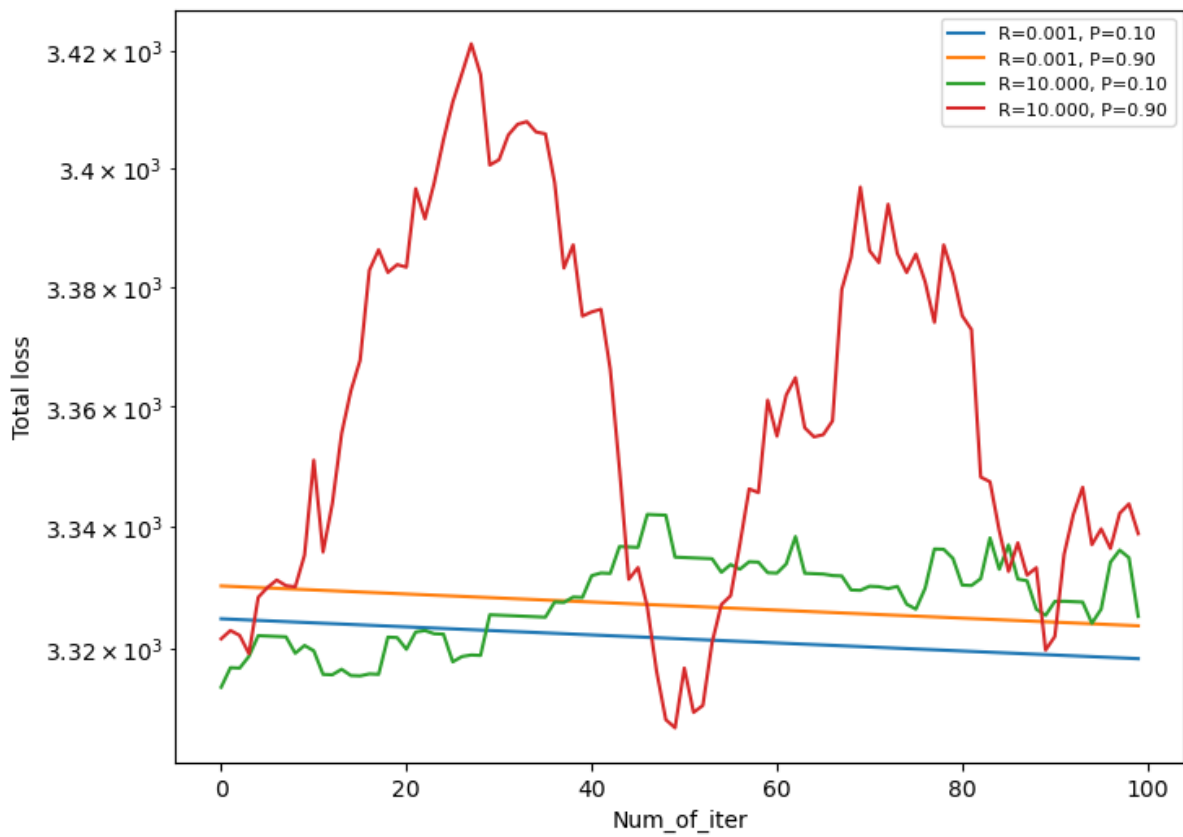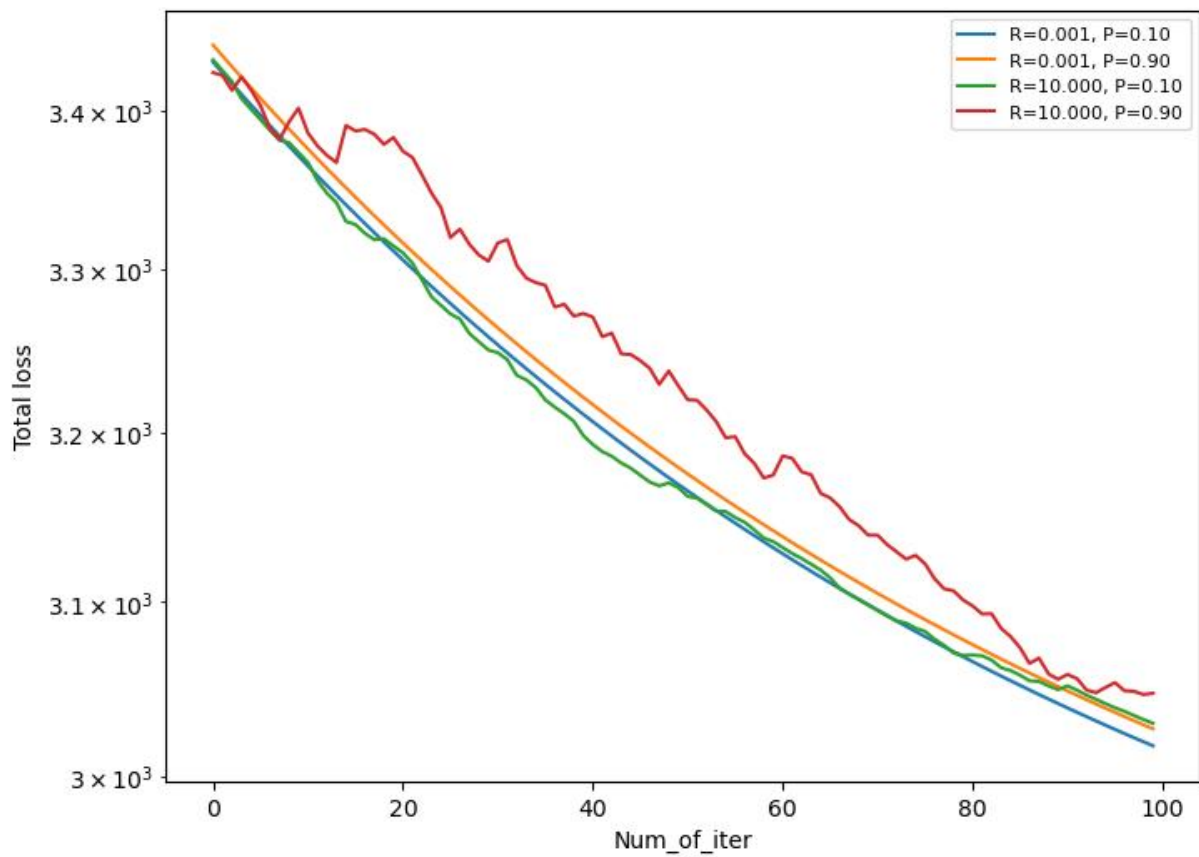
Lamda = 0,0001

Alpha=0.1

lr_fade=1   %%Constant step size for each iteration
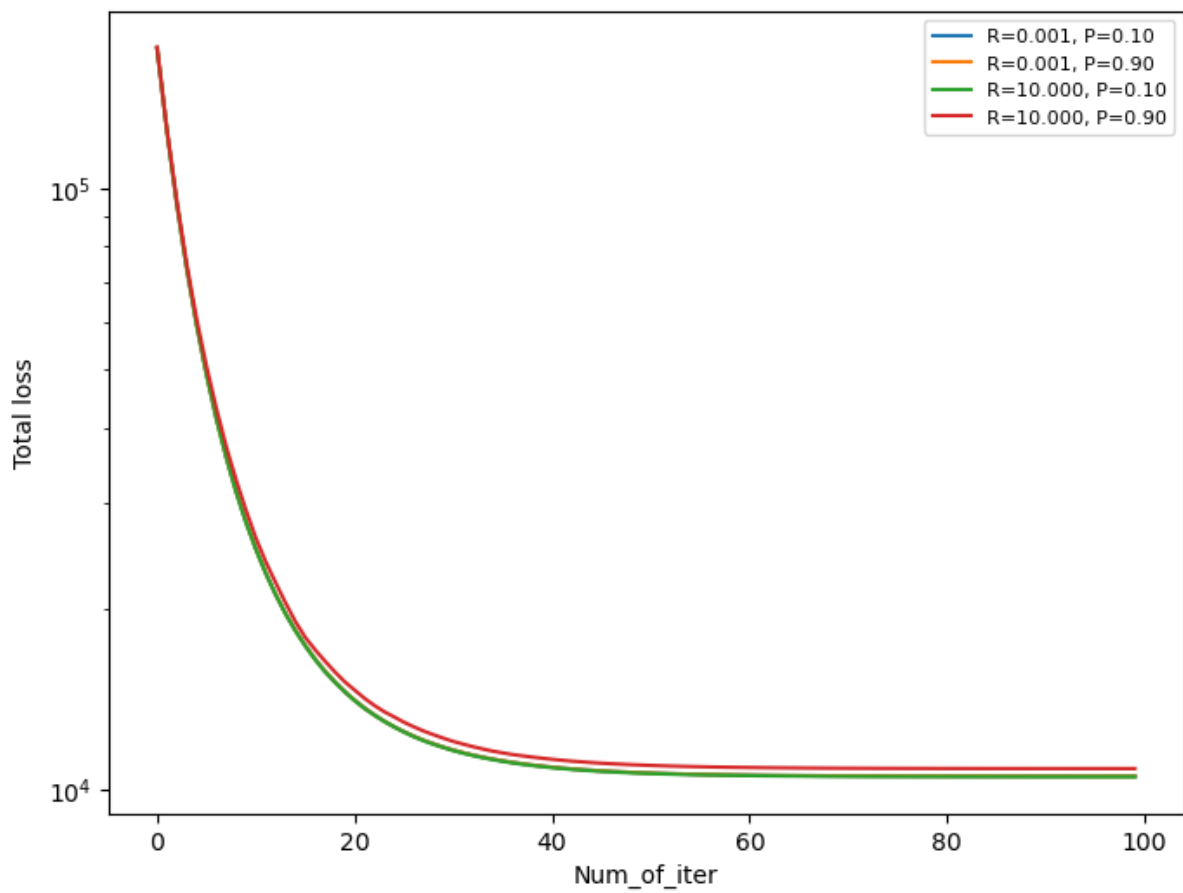
Computer Assignment 4

Lamda = 0,001

Alpha=0.1

lr_fade=1 %%Constant step size for each iteration

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Lamda = 0,1

Alpha=1

lr_fade=0.9   %varying step size for each iteration

As lambda decreases, the curves seems to be flattened out.

When p is small, the added noise is also small, which means that the optimization process is less affected by outliers. However, when p is large, the added noise can significantly affect the convergence rate, leading to slower convergence or convergence to

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suboptimal solutions. Similarly, when R is small, the added noise is also small, which can lead to faster convergence. However, when R is large, the added noise can have a significant impact on the optimization process, which can also slow down the convergence rate.